

WHAT IS CLAIMED IS

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1. A recordable optical information recording medium having addresses t for respective sectors, comprising:

an area A1 starting from an address t1 to  
10 which access is made by a recording apparatus only at a time of recording operation;

an area A2 starting from an address t2 to  
which access is made by the recording apparatus either  
at a time of recording operation or at a time of  
15 reproducing operation; and

an area A3 starting from an address t3 to  
which access is made either by the recording apparatus  
or by a reproducing apparatus either at a time of  
recording or at a time of reproducing, and

20 wherein the addresses t are set consecutively  
with respect to a physical arrangement of the sectors in  
each of said areas A2 and A3, and said area A1 has at  
least one inconsecutive part at which the addresses t  
are not consecutive with respect to the physical  
25 arrangement of the sectors.

2. The recording medium as claimed in claim 1,  
wherein the inconsecutive part has no sector range, and  
such that an address  $t_1'$  and an address  $t_2'$  are not  
consecutive, where  $t_1 < t_1'$ ,  $t_2' < t_2$ , and the starting  
5 address  $t_1$  of said area  $A_1$  is set precedingly by the  
amount of  $(t_2' - t_1')$ .

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3. The recording medium as claimed in claim 1,  
wherein the inconsecutive part has a range of  $A_1'$  in the  
direction of the physical arrangement of the sectors  
between addresses  $t_1'$  and  $t_2'$ , the addresses  $t$  from the  
15 address  $t_1'$  to the address  $t_2'$  are not consecutive,  
where  $t_1 < t_1'$ , and  $t_2' < t_2$ , and arbitrary addresses  $t_x$   
can be set in the range  $A_1'$ .

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4. The recording medium as claimed in claim 1,  
wherein the inconsecutive part has a range of  $A_1'$  in the  
direction of the physical arrangement of the sectors  
25 between addressees  $t_1'$  and  $t_2'$ , the addresses  $t$  from the

address  $t_1'$  to the address  $t_2'$  are not consecutive,  
where  $t_1 < t_1'$ , and  $t_2' < t_2$ , and there are no addresses  
set in the range  $A_1'$ .

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5. The recording medium as claimed in claim 4,  
further comprising a pre-pit in the inconsecutive part.

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6. The recording medium as claimed in claim 1,  
15 wherein the addresses are recorded in wobbles of a guide  
groove.

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7. The recording medium as claimed in claim 1,  
configured to have a characteristic such that, a degree  
of modulation is equal to or lower than 0.5 obtained  
when recording is made through the recording apparatus  
25 employing either an optical pickup for CD having a

wavelength  $\lambda$  = 789 nm, and a numerical aperture of an objective lens NA = 0.50 or an optical pickup for DVD having a wavelength  $\lambda$  = 650 nm, and a numerical aperture of an objective lens NA = 0.60, at a relative speed V  
5 such that V = 0.5 V<sub>min</sub> where V<sub>min</sub> represents the lowest recordable relative speed between the optical pickup and the recording medium, with a recording signal of the largest mark length using a light-emitting waveform comprising a multi-pulse sequence.

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8. A recording apparatus comprising:  
15 a detecting part which detects as to whether or not the inconsecutive part for the addresses t exists in the area A1 of the recording medium claimed in claim 1; and  
a correcting part which performs correlation  
20 for the inconsecutive addresses thereof when the inconsecutive part is detected by said detecting part.

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9. A recording method comprising the steps  
of:

a) detecting as to whether or not the  
inconsecutive part for the addresses t exists in the  
5 area A1 of the recording medium claimed in claim 1; and  
b) performing correlation for the  
inconsecutive addresses thereof when the inconsecutive  
part is detected in said step a).